Clean Air Act Compliance Inspection Report

United States Environmental Protection Agency
Region 10 – Seattle, WA

Clean Air Act Full Compliance Evaluation Inspection Report

Central Washington University

Ellensburg, Washington

Inspection Dates: May 17-18, 2022

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Table of Contents

Contents

Attachments

Facility and Inspection Information

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ICIS AIR Number:	WA0000005303700004
SIC: NAICS:	8221 – Colleges and Universities 611310 – Colleges, Universities and Professional Schools
Permit Number:	Notice of Construction (NOC) Approval Order No. 10AQ-C147 (First Revision, Issued 6/25/2020)
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Dates of Inspection: May 17-18, 2022

Date of Report: July 26, 2022

Inspection Start/End Times: Day One 8:20 am – 4:45 pm
Day Two 8:15 am – 4:20 pm

Inspection Notice: This was an unannounced inspection.

This was a Clean Air Act (CAA) compliance inspection by the Environmental Protection Agency (EPA) and the Washington Department of Ecology (ECY), with EPA lead. The purpose of the inspection was to determine compliance with the facility's air operating permit (No. 10AQ-C147) and other CAA requirements. EPA's federal air rules were also reviewed for possible applicability to facility operations.

The facility is a state university campus. According to the campus web site,[1] the university was founded in 1891 and has a total enrollment of 10,327 (2020 – 2021) with 2,800 students living on campus. There are 20 residence halls and five apartment complexes.

The web site also shows that the campus has a fleet of vehicles, fuel storage tanks and chemical labs for instructional purposes. It states that the campus has programs in place to manage hazardous waste and asbestos. Construction projects in recent years included the Health Science Project (to demolish Hertz Hall and construct a new, 80,000 square foot Health Sciences building in 2016), and the Health Education Project at Nicholson Pavilion (to renovate and add 40,000

[1] See https://www.cwu.edu/facility/

square feet of new space to the existing building, which started in 2021 and includes asbestos abatement).[2]

State air operating permit No. 10AQ-C147 (First Revision) was issued on June 25, 2020, and replaced the previous air permit, issued September 10, 2010. The revised permit authorized a project to install and operate three new steam heat boilers (B19-B21) located at the Student Village Boiler Plant. As described in the permit, the facility is a minor source for criteria pollutants and hazardous air pollutants (HAPs). The facility is classified as a "Synthetic Minor 80" source, in which the permit restricts potential emissions to stay below the Title V Permit Major Source threshold of 100 tons per year for nitrogen oxides (NOx) and other criteria air pollutants. Emission sources identified in the permit are: 11 emergency generators, 21 boilers and one paint booth. The permit states that "the source shall comply with all state and federal laws and regulations" and references federal air rules for internal combustion engines. However, it does not itemize federal requirements for the internal combustion engines. (See Federal Air Rules, below.) The permit includes monitoring, recordkeeping and reporting requirements to demonstrate compliance. (See Attachment 3, Emission Units.)

The inspection included examining the emission units listed in the air permit, looking for additional, nonpermitted equipment or activities, reviewing records, interviewing operators and other staff, and taking pictures.

Disclaimer

This report is a summary of observations and information gathered from the facility at the time of the inspection and from records review. The information provided does not constitute a final decision on compliance with CAA regulations or applicable permits, nor is it meant to be a comprehensive summary of all activities and processes conducted at the facility.

1. Compliance History

A review of EPA's Enforcement and Compliance History Online (ECHO) database[3] shows that at the time of the inspection, the facility was reported as having no CAA violations in the last three years. ECHO shows no formal or informal enforcement actions against the facility in the last five years.

The last State Full Compliance Evaluation (FCE) was on January 28, 2020. The FCE report included a review of Annual Emission Inventory reports (Annual Reports) submitted by the facility for calendar years 2015-2019, and on-site inspections performed on September 28, 2017, and September 7, 2016. The State FCE report found the facility to be in compliance.

[2] See Nicholson Pavilion section of this report, below.
[3] See https://echo.epa.gov/

2. Inspection Elements/Order

- **Pre-Inspection Observations**
  - When parking at the campus police and parking building at approximately 8:20 am, I looked at the stacks for the New Heat Plant boiler stacks (Emission Units B2 – B5). The stacks were clear, with no visible emissions. The temperature was about 50 ºF, the sky was mostly cloudy, and winds were light, approximately five miles per hour.

- **Entry and Opening Conference**
  - Inspection team members from EPA R10 and Washington Department of Ecology (ECY) arrived at about 8:20 am at police and parking building. ECY inspector Nolph went to the parking service counter and received daily parking passes for the two days of inspection. Parking service staff said we did not need a parking pass for the EPA fleet van because it had US Government plates.
  - We then walked next door to the Jongeward Plant Services Building to start the inspection. At the front counter, we announced ourselves and explained we were there for an unannounced air compliance inspection and signed the visitor's log. I showed my credentials to the service staff at the counter. We asked to see Jeremiah Eilers, the campus environmental point of contact and learned he was on vacation that week.
  - We met James Breese, Maintenance Mechanic and Site Supervisor who offered to help with our on-site inspection. I said the inspection would include checking on compliance with the air permit and with other CAA requirements that might apply, and we expected it to take two days. We said we would like to start by touring the campus to look at the engines, boilers and the paint booth listed in the permit (Attachment 3).
  - Mr. Breese arranged for Tom Jenkins, Maintenance Mechanic I, to escort us for both days of the inspection. In addition, Vince Foley, Director, Administrative Services, also joined us for the start of the facility tour. I showed Mr. Jenkins the permit which has a list of engines, boilers, and a paint booth. I said at the end of the inspection we would have an exit meeting to review what we saw and learned from the inspection and identify any concerns we might have at that time.

- **Facility Walk-Through (Day One)**

We were escorted by facility representatives Tom Jenkins, James Breese and Vince Foley. Our walk-through included looking at equipment listed in the permit inventory (Attachment 3), observing for additional equipment not listed in the permit, observing operating status of process equipment and pollution control equipment (if any), interviewing operators and taking photographs.

Our tour began at 9:15 am. I noted information from my observations and from interviews with facility representatives. A Digital Image Photo Log is Attachment 1 to this report. A Map of the facility is Attachment 2.

Vehicle Maintenance Shop (Not Listed in Air Permit)
Mr. Foley discussed with EPA inspector Papp the vehicle fleet on campus as having more than 200 vehicles. He explained that major maintenance activities are performed at third-party, private repair shops.

Gas Dispensing Facility (GDF) (Not Listed in Air Permit)
Adjacent to the Vehicle Maintenance Shop, the campus has a gasoline pump to put fuel directly into cars and trucks. The pump has two hose lines and drivers use a keycard to access the pump. The gasoline storage tank is underground (UST). There is also a diesel fuel pump in this area with an above-ground storage tank. The diesel storage tank is located within a containment area (an approximately six-inch cement curb encircling the tank). I described EPA's federal air rule for GDF facilities, (40 CFR Part 63, Subpart 6C) and explained that EPA requirements for a GDF vary, depending on the amount of gasoline dispensed monthly. I gave the facility representatives a copy of EPA's compliance assistance brochure for the subpart 6C rule.

Records provided by the facility show monthly throughput of gasoline dispensed at the GDF for the last two years. The monthly average was 2,366 gallons of gasoline over that time. The highest month was 3,955 gallons in March 2022. (See Records Review, above.)

A used oil storage tank was also observed adjacent to the diesel storage tank. The used oil tank was labeled "Used Oil Only" and was white, square and approximately five feet tall.

Storage Tank, Water (Not Listed in Air Permit)
Also adjacent to the Vehicle Maintenance Shop we saw a 56-foot tall, white storage tank. We asked the facility representatives what it was storing, and they weren't sure. We walked around the tank and I did not find labeling for its contents but did find a metal plate attached to the tank wall stating it was constructed in 1997 and has a capacity of 1,142,000 gallons. Later that day, Mr. Foley said he confirmed it was a water tank.

New Heat Plant, Boilers B2 – B5 and Generator G1
We went to the New Heat Plant at 9:30 am and met Tony Dean, Plant Lead. Mr. Dean had us identify ourselves and sign in as visitors at the control room. He escorted us through the plant and showed us the four boilers and one generator located there. These units are listed in the permit, **Section 2.0 – Emission Units**. In a process we repeated throughout the two days of inspection, we examined the boiler and engine manufacturer's nameplates to compare the information shown to the information in the permit. We also looked at control panels to confirm the current operating status of the equipment. For the generators, we looked at meters to note the total operating hours, operator logbooks and hand-written notations made on equipment which indicated oil and oil filter changes (notations showing the dates and engine hours at time of service).

Mr. Dean said they did a tuning of the boilers last week and do so once or twice a year. He said the New Heat Plant provides heating, hot water and steam to the campus. He said the plant has no air pollution control devices (APCD).

Our notes are summarized below.

Boilers

- The three largest boilers are each a Cleaver-Brooks Model DL-76. The permit assigns these units Emission Unit ID Numbers B2, B3 and B4. However, at the New Heat Plant they are labeled as "Boiler 1, 2 and 3," respectively. Boilers 1 and 2 each have a power rating of 85.85 MMBtu which is consistent with the description in the Permit, Table 2. Boiler 3 has a rating of 87.70 MMBtu which is slightly higher than shown in the permit. According to the permit, the boilers were installed in 1975. The dates of manufacture for the three units are 9/20/74, 9/24/74 and 11/11/70, respectively.
- The three boilers run primarily on natural gas as fuel but are also capable of burning fuel oil.
- Only Boiler 2 was operating. The monitor display showed that Gas Flow was 33.5%, Steam Flow was 24.54 and Boiler Pressure was 99 PSI at the time of the inspection.
- "Boiler 4" is the smallest at the plant and is a Cleaver-Brooks package boiler Model CB200-800 with a power rating of 33.48 MMBtu/hr (natural gas) which is consistent with the permit. It is also capable of burning 239 gallons per hour of fuel oil. It was manufactured on 10/26/82, consistent with permit information that it was installed in 1983.

We discussed the boiler use and maintenance with Mr. Dean. The boilers are physically capable of burning both natural gas and fuel oil. Mr. Dean said that normally, oil is just for backup purposes. He said as an example, there was a time years ago when the gas line to campus went down, and they ran the boilers on fuel oil. He said there are two fuel oil storage tanks at the plant with a storage capacity of 30,000 gallons per tank. He showed us the fuel oil lines painted yellow that feed the boilers and the fuel return lines. We asked if they track the gallons of fuel oil burned and he said they can do that two ways: with a fuel meter mounted on the wall and with oil flow sensors that tell them how much oil is burning based on demand.

He showed us a storage tank monitor displaying information for Tank 1 ("West") and Tank 2 ("East"). The status for both tanks was "normal" at the time of the inspection.

- Tank 1 Volume: 25,572.22 (G)
    - Water: 0.00 (G)
- Tank 2 Volume: 25,248.58 (G)
    - Water: 0.50 (G)

Generators

- The engine is a Caterpillar Model D346, consistent with the description in the Permit, Table 1. The date of manufacture was not found on the unit. The horsepower (HP) rating was not found on the unit. The electrical output rating for the unit was shown as 335 KW on the manufacturer's nameplate.
- The engine runs on diesel fuel.
- The Generator Test Log (Logbook) was reviewed on site. The earliest entry started on 7/17/18 and the most recent was 12/29/21 when the hour meter reading was 1,041. (As shown in Attachment 1, Photo Log, Picture P5170160.) The Logbook showed that the engine was started up approximately monthly for readiness checking. No oil changes, oil filter changes, or inspections for air filters, belts or hoses were indicated in the Logbook.

- The hour meter reading at the time of the inspection was 1,048. Therefore, seven hours of operation after 12/29/21 were not recorded in the logbook.
- Other maintenance records for this unit might be available in the New Heating Plant control room.

Emergency engine G1 had visible oily stains on the engine block and on hosing underneath the engine. Mr. Dean said the engine provides enough power to turn on lights and the plant controls. The operator's logbook noted times when the engine was started up for monthly testing. The last startup was noted on 12/29/21, with an hour meter reading of 1,041. The hour meter reading on the day of the inspection was 1,048. Therefore, the engine had run an additional seven hours since the last entry in the logbook. Mr. Dean said that the operator assigned to run the engine, Mike Clerf, was retiring soon. He said it's important for the operator to write down his activities.

We discussed EPA's federal air rule, 40 CFR Part 63, Subpart ZZZZ (the "RICE NESHAP"). I said that the rule applies to new and existing engines and requires minimum preventive maintenance such as changing the oil, checking the air filter, belts and hoses every 500 or 1,000 hours of operation or annually, whichever comes first.[4]

We next looked at a Chemical Storage Room in the New Heat Plant. We saw chemicals in blue plastic containers which were placed on a short (2 inch) cement curb on one side of the room. The containers were labeled as coming from supplier CH20 from Tumwater, Washington. Several floor drains were on the cement slab in this room, two of which showed green discoloration which may indicate they may have come in contact with chemicals. Mr. Dean said he thought the drains were brass, which is causing the discoloration. A red, flexible hose ran from the back side of the storage containers to the floor drains. Mr. Dean said the drains go to the sewer. The blue, chemical storage containers. I noted the following chemicals in storage there:

- Amine (Corrosive)
- Sulfite
- Unibrom Plus (Corrosive)
- Hydronic System Treatment (Oxidizer)
- POSCA
- Amide Alkyl
- Sodium Hydroxide
- Acrylic Polymer
- Sodium Nitrate
- Sodium Borate
- Azole Salts

We signed out at the control room at 10:37 am and continued our tour of the campus with escort Tom Jenkins.

[4] See Subpart ZZZZ, Table 2d.

Paint Booth, Jongeward Building, Carpentry Shop (Not Listed in Air Permit)
Our next stop was at a paint booth located in a carpentry shop in the Jongeward Building. We arrived at about 10:40 am. The paint booth is not listed in the air permit.[5]

The unit was not operating at the time of the inspection. The booth measured approximately 15 ft wide x 15 ft deep. A hooded air handling system with three square air filters was located at the back end of the booth. I saw approximately two dozen cans of paint, wood stain and spray paint cans stored on a shelf inside the paint booth. A flammable materials storage cabinet was inside the booth. Patches of paint colored the walls inside the booth. Countertop materials were stacked on a cart inside the booth and appeared to have been cut there. I saw a half dozen shop vacs on wheels stored in the booth. A layer of fine, pale gray dust covered surfaces in the booth including the floor. We examined the air filters. The filters measured approximately 3 ft x 3 ft and about 0.5 inches thick. They were caked with dust. We looked for a pressure gauge for this room but could not find one.

We saw an air duct and fan above the hood. We walked outside the building and saw a stack protruding above the roof, above where we estimated the paint booth was located.

Paint Booth, Grounds Warehouse (Permit Condition 2.3)
We arrived at this location at 11:00 am. We were assisted by Operator David Hall and Maintenance Mechanic Joe Allemand at this location. In addition, Paint Lead Troy Totten (working at an off-campus location that day) was made available on the phone during our time at the paint booth.

The paint booth was not operating. Words painted over the paint booth entrance stated, “Shaw’s Furniture & Appliance,” which suggests it was purchased used and relocated at the Grounds Warehouse Building. The paint booth measured approximately 15 ft wide, 12 feet tall and 30 ft long. The air permit limits this paint booth to eight hours of operation per day, not to exceed five days per week. Paint usage is limited to 55 gallons per month. (Permit Conditions 4.1.2 and 4.1.3). Additional restrictions regarding spray equipment design and VOC content of coatings are specified in the permit (Conditions 4.2 and 4.3). Permit Condition 5.5.1 requires that a “negative static pressure shall be maintained during use.” Condition 6.5 requires the facility to monitor the pressure differential across the paint booth.

We stepped into the booth and saw paint overspray on the walls and ceiling. Incoming air comes through ceiling air filters and leaves the booth through air filters in the floor. To examine the floor air filter, we lifted one of the floor grates and I pulled on the edge of a filter. The filter was two inches thick and was white on the outside layer, green on the inside layer. The top site of the filter was discolored gray from paint collected on its surface. The bottom side of the filter was clean.

We asked for an operator to turn on the fans so we could see the booth in operation. Operator David Hall came over and turned on the fans. As we watched, a magnehelic gauge on a wall of

[5] Only the paint booth at the Grounds Warehouse Building is identified in the permit. Restrictions apply. See Permit Condition 2.3.

the booth showed that pressure changed from zero to 0.2" H2O PSIG. A Spray Booth Operator's Log, attached to a clipboard, showed dates of operation, manometer reading, filter condition and type of spray gun used. (See Digital Image Log, Photos PS170186 and PS170187.) The log provides three possible values for manometer reading: -1, 0 and 1. In other words, the form does not have a blank space for the operator to write down the actual pressure observed, but instead has the operator choose one of the three values. As noted above the pressure we observed at the time of the inspection was just 0.2, which is negative, but does not match up with one of the pre-printed values on the form.

The most recent log readings were from 2/16/2020 through 1/6/2022 (approximately 23 months). In those 23 months, the log indicated that the booth was used 16 days.

We requested records of the paints and coatings used at this and other spray booths at the facility. We also requested records that show how the magnehelic pressure gauge works at the paint booth. See Records Review Section, above.

While we were in the Paint Shop we saw open cans of paint and a row of six stainless steel sinks for washing parts. Stepping outside, we saw a stack located above the paint booth area. The stack had a cap. ECY Inspector Nolph and I discussed whether the stack had been modeled as having a cap or not, during air permitted. Inspector Nolph said we could check back on that. We also saw a roof vent located above the sink washing station.

Surplus Warehouse (Not Listed in Air Permit)

We went next to a warehouse which stores equipment and supplies that were being removed (sold or shipped out) from campus. We arrived at about 12 noon. At the warehouse we spoke with Jason Bakeman, Property Manager. Inside and outside the warehouse we saw a large assortment of furniture, office equipment, shelving, cabinets and tires. We asked if there were any refrigerators there for shipping off campus. Mr. Bakeman showed us appliances stored outside. We saw the following

- two minifridges (black, 2 x 2 and white 2 x 2)
- one large refrigerator (missing a door and compressor)

We asked if the refrigerants are drained from the appliances before disposal. Mr. Bakeman said the contractor who picks them up may do that. He suggested we ask Katie Litzenberger, Campus Safety Manager about that.

Adjacent to the warehouse we examined a Solid Waste Accumulation Area. The area was a grouping of a half dozen shipping containers. Container Number 4 was labeled "Refrigeration Equipment to be Decommissioned" and was empty, except for four small, pressurized tanks.

- One tank (pink) was labeled as containing "Forane 410A"
- One tank (white) was labeled "Refrigerant 410A"
- One tank (green) was labeled "Forane 22."
- One tank (gray) was present in the shipping container; however, I did not make a note of its contents.

Shipping Container Number 3 was labeled “Fluorescent Tubes” and had a couple dozen fluorescent tubes stored in boxes.

Inside one of the containers I saw a black drum labeled “Waste. Shop Rags. Flammable” which was uncovered and empty.

We took a lunch break from about 12:30 – 1:30 pm.

Student Union Building, Generator G9, Boilers B8-B10

The emergency generator G9 for the Student Union Building is outdoors, at the back loading dock and trash compactor on the south side of the building. It is on a cement pad and is covered with a roof. The stack is horizontal and is also covered by the roof. We waited for an operator to come by and unlock the door to the engine housing. While we were waiting, we noticed a dark, oily stain on the ground coming from the trash compactor at this location, leading to a storm drain. A drain valve and flexible hose from the trash compactor was in the open position. The storm drain was labeled: “No Dumping. Drains to River” with a graphic of a fish stenciled there. (See Figures 1 and 2, below.)

Note that the fuel storage tank for the emergency generator is housed with the engine unit. A fuel leak in this area would very likely flow to the storm drain shown in Figures 1 and 2, below. Records reviewed for this inspection show this generator had the greatest amount of use of all generators on campus (2021), and significant maintenance problems, including a battery that blew up, a leaking water pump and leaking heater. (See Records Review Section, below.)

Electrician Jeff Rinehart met us at the generator unit and unlocked the access doors.

Generator

- Cummins Model DQAF – 5706836, manufactured on 03/2005 and is rated at 470 HP, consistent with the Permit, Table 1.
- The engine runs on diesel fuel.
- The engine block had an EPA emissions statement that said, the engine complies with US EPA and California regulations for heavy duty nonroad engines diesel engines.
- The Logbook for the engine was reviewed. It shows approximately monthly engine start-ups for readiness checking. It does not show oil changes, oil filter changes, or inspections for air filters, belts or hoses.

Boilers

- The boilers RBI Model MW1250, rated at 1.25 MMBtu/hr, consistent with the information provided in Permit Table 2.

Figure 1: Student Union Trash Compactor (at right), with oily stain leading to storm drain. Generator G9 in the background.

Figure 2: Student Union Storm Drain, labeled "No Dumping, Drains to River" Oily fluid stains are seen going to this drain.

Science Building, Generator G5

Emergency generator G5 is located indoors, in Room 137.

- This is a Detroit Diesel/Energy Dynamics Model 80837416, manufactured 2/14/97, consistent with the description in the Permit, Table 1.
- The hour meter reading was 217.6.
- The engine runs on diesel fuel.
- Hand-written notations on the oil filters showed they were changed on 10/30/18 Engine hour reading at that time was 190.0.
- Two fuel filters were hand-notated as changed on 2/25/17.

Dean Hall, Generator G10

Emergency generator G10 is located outdoors. We arrived at this location at about 3:08 pm.

- This is a Cummins/Ford Model GGHE-7082116, manufactured 4/18/2008, consistent with the description in the Permit, Table 1.
- The engine runs on natural gas.
- An emissions control label on the engine block states that it is "excluded from (EPA) requirements of 40 CFR Part 1048 as a Stationary Engine."[6]
- The Logbook was reviewed on site. The earliest entry started on11/30/18 and the most recent was2/15/22. The Logbook showed that the engine was started up approximately monthly for readiness checking. No oil changes, oil filter changes, or inspections for air filters, belts or hoses were indicated in the Logbook.

Library, Generator G3

- This is an Onan/Alis-Chalmers generator. The Model Number shown on the unit is 75.ODYC-15R/13449B. The permit shows the Model Number is 3500.
- We did not find a HP rating for this unit. The electric power rating shown was 75 KW (100 HP)[7]
- The engine runs on diesel fuel. A diesel fuel tank is in the next room.
- The Logbook shows approximately monthly engine start-ups for readiness checking. The last recorded start-up was in on 12/29/21, with an hour meter reading of 386.3. According to the log, from May 2017 – December 2021, the engine ran approximately 46 hours (about 0.8 hours per month, on average).
- The current engine hour meter reading at the time of the inspection was 386.3.
- Hand-written notations on the oil filters showed they were changed on 6/11/20. Engine hour reading at that time was 371.
- The exhaust stack for this unit makes two, 90-degree turns. It then exits the building horizontally.

[6] 40 CFR 1048 – Control of Emissions from New, Large Nonroad Spark-Ignition Engines.
[7] EPA AP-42 compilation of emission factors: 1 KW = 1.341 HP (Mechanical). See https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-compilation-air-emissions-factors

Discovery Hall, Generator G11

- The engine is an Olympian, Model G150LG2, which is consistent with the description in the Permit, Table 1. It is located outdoors.
- We did not find a HP rating for the unit. The electric power rating was 150 KW.
- The engine runs on propane fuel.
- The Logbook shows approximately monthly engine start-ups for readiness checking. The last recorded start-up was in on 2/15/22, with an hour meter reading of 128. According to the log, from the replacement of the engine was in December 2019.
- An oil change is noted in the Logbook, on 6/24/19 and again on 1/6/20 (when the engine was replaced).
- The engine was manufactured on 11/25/2014 (the date on the engine sticker) However, the engine block was replaced on 12/18/19. The facility representatives said the original engine block was damaged from sand in it, leftover from the metal casting process. The replacement was covered by the factory under warranty, they said. (See email, Attachment 8, Records Response, "Discovery Hall Generator" Folder.)
- The engine block has two different EPA emissions statements:
    - "This engine is exempt from EPA standards under **40 CFR 1068.262**." (Ford Motor Co. 9/25/19)[8]
    - "This replacement engine is exempt under 40 CFR **1068.240."** (Generac Power Systems)[9]

Health Center, Boilers B17, B18

We examined the two boilers for the Health Center.

- We confirmed the two identical, Viessmann Vitodens 200-W boilers burn natural gas and are rated at 0.5 MMBtu/hr, consistent with the information provided in Permit Table 2.
- Both units were operating. One unit was 149 ºF, and the other was 109 ºF. According to the manufacturer's statement on the units, they produce low pressure steam and hot water.
- A Service Checklist taped to the wall showed the last service was in January 2011 (11 years ago), when the air filters were changed.

We ended our facility tour for the day at about 4:15 pm. We stopped and made plans for the next day of inspection. Before leaving the facility, we stopped at the Jongeward Building service counter and to let the staff know we were leaving for the day and would return at 8:15 am the next morning.

We asked for a point of contact for the asbestos removal project at the Nicholson Pavilion, and were informed Joanne Hilleman is the project manager for asbestos projects. (See Attachment 4, Asbestos Notification to remove 3,600 square feet of cement asbestos board.) We asked the Jongeward Building staff please contact Joanne Hilleman to let her know we wanted to inspect that job site the next day.

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[8] 40 CFR 1068.262 – Shipment of engines to secondary engine manufacturers. This section specifies how manufacturers may introduce into U.S. commerce partially complete engines that have an exemption or a certificate of conformity held by a secondary engine manufacturer and are not yet in a certified configuration.
[9] 40 CFR 1068.240 – Exempting new replacement engines.

We left at 4:45 pm.

- **Facility Walk-Through (Day Two)**

The inspection team returned to the facility at 8:15 am for day two of the inspection. We started at the Jongeward Building and met with facility representatives in a conference room to go over a plan for the day. Attending from the CWU campus were Joe Allemand (Maintenance Mechanic), James Breese (Maintenance Mechanic and Site Supervisor) and Tom Jenkins, (Maintenance Mechanic).

We briefly reviewed the inspection areas covered on day one of the inspection. We broke into two groups to go to the remaining sites on campus today: (unless otherwise indicated, see Permit Tables 1 and 2 for generators and boilers at each campus location):

Team 1 EPA Inspectors Papp and Whyte with facility escort Allemand and Breese	**Team Two** EPA Inspectors Pavitt and Skeens, ECY Inspector Nolph with facility escort Jenkins
Brook Lane	Nicholson Pavilion (asbestos abatement project, not listed in permit)
Student Village Boiler Plant	Randall Hall (Paint Booth, not listed in permit)
President's Residence	Psychology Building
McConnell Hall (Paint Booth, not listed in permit)	Wahle Apartments
Sod Farm	Computer Center
Portable Use Generator	
Substation B	
Getz Shorts Apartments	

We arranged to keep in touch throughout the morning and to regroup as one team if time allowed before ending the inspection. We also scheduled an exit meeting later that afternoon with facility representatives. (See Exit Meeting, below.)

I said our asbestos inspection at Nicholson Pavilion may involve collecting asbestos samples. I said if I collected samples, the facility could ask for split samples or collect their own at the same time. I said that the inspectors would be taking photos, interviewing campus staff and asking for records as we had done on the first day.

Our facility walk-through started just before 9:00 am.

<u>Nicholson Pavilion (asbestos compliance)</u>

- The Nicholson Pavilion is part of a campus sports center undergoing a major renovation, including asbestos removal. Performance Abatement Services (an asbestos contractor) submitted notification to WA ECY on 1/11/22 in which they described plans to remove 3,600 square feet of cement asbestos board (CAB) panels from the building. According to

the notice (Attachment 4), the project was scheduled to start on 1/11/22 and end on 6/30/22.

- We parked in the front parking lot and walked to the back of the Nicholson Pavilion, where we found General Contractor Lydig Construction, Kennewick, WA. We introduced ourselves and I showed my credentials to Nick Franco, Project Engineer and Jim Dawson, Site Supervisor. We were soon joined by Joe Harvey, Senior Superintendent. I explained we were there to check on asbestos removal by Performance Abatement Services and showed them the asbestos notice.
- The Lydig Construction representatives said Performance Abatement Services was not on site and had not started asbestos removal. They said they should start around July 1st when school was out. I explained EPA relies on notifications to tell us when the projects are active, so we can make plans and check on compliance with EPA's asbestos regulations. I said I would contact Performance Abatement and ask them to revise the notice with the new schedule.[10]
- Lydig Construction escorted us into the Pavilion building and showed us the CAB asbestos that would be removed. The CAB was on interior walls, colored white and in good condition. I estimated the CAB panels measured 4 feet wide x 7 ft tall.
- While walking through the building I saw a white, fluffy ceiling material on a stairway and asked if it had been tested for asbestos. The Lydig representatives said that had been tested and did not have asbestos. I asked them to send me the lab test report for the testing, which they sent me via email. (See Attachment 4.)

We left the Nicholson Pavilion at 9:42 am.

<u>Wahle Apartments, Boilers B15-B16</u>

- The two boilers are Cleaver Brooks, CFC700 boilers, rated at 1.8 MMBtu/hr. is consistent with the description in the Permit, Table 2. The date of manufacture was not displayed.
- The boilers run on natural gas fuel.
- Both units were operating, and a steam plume was visible from the rooftop stacks.
- No service checklist was found with these boilers.
- The boilers are in a central building that provides steam heat to multiple apartment units.
-

<u>Psychology Building, Generator G2</u>

- The engine is an Onan Model 17.5RDJF-4XR, 17.5 KW unit which is consistent with the description in the Permit, Table 1. The engine horsepower and date of manufacture were not found on this unit.
- The engine runs on diesel fuel.
- The Logbook was reviewed on site. The earliest entry reviewed at the time of the inspection started on 9/20/17 and the most recent was 12/29/21. The Logbook showed that the engine was started up approximately monthly for readiness checking.
    - An oil change/oil filter change/air filter change was noted on 11/8/19.

[10] Inspector Pavitt called Performance Abatement Services on 5/19/22, and they revised their notice the next day to show a new work schedule: 6/13/22–7/30/22.

    - An "oil change ??" was noted in the month of October 2021.
    - An oil change was noted on 11/3/21, at hour meter reading 927.
- No other inspections for air filters, belts or hoses were indicated in the Logbook.
- Hand-written notations on the oil filters showed they were changed in November 2021 and the engine hour reading was 927 (consistent with the Logbook entry that date).
- Oil was observed on the floor around the generator and kitty litter absorbent material had been poured on top of it. The generator is located indoors, accessible through the Mechanical Room #169, and from there, in the basement Room 002.

Randall Hall (Paint Booths, not listed in permit)

- We observed two paint booths in Randall Hall.
    - A Global Finishing Solutions, ("Dry Booth") Model IDB-67, S/N 43262. Unit SB-1.
        - The booth is located inside a room with a door that closes. A sign on the door lists spray booth rules.
        - The booth appeared to only be used for spray paint and photo mount spray applications.
        - Supply air comes into the room. The booth is vented to the outside.
        - Signs posted with instructions to spray only in booth, and to come to the office immediately if the fan in the spray booth is not working.
        - A sticker on the booth from Global Finishing Systems stated that "spray booths conform with OSHA and NFPA-33 regulations. However, this equipment is designed expressly for removal of particulate matter only. Reduction of … (VOCs) required either coating reformulation or optional additional equipment."
        - The 12 filters in the booth were completely saturated.
    - A Paasche Spray Booth, Type FABF-4 in the Ceramics Department. We met Instructor Stephen Robison, who said the booth is used for spraying glazes on ceramics.
        - The booth measures approximately eight feet tall x four feet wide. Not enclosed (open on the front side) but has a vent.
        - The eight air filters were completely saturated.
        - SDS (safety sheets) were available for the glazes, according to Mr. Robison.

Brook Lane, Boiler B6

- The two boilers are Thermal Solutions model EVA0250BN1UABs manufactured in 2003 which is consistent with the description in the Permit, Table 2.
- The boilers run on natural gas fuel.
- Both units were operating.
- No service log was found.
- Upon entering the room, Inspector Whyte observed a slight smell of natural gas/mercaptan.

Student Village Boiler Plant, Boilers B19-B21

- The three boilers are Cleaver-Brooks CFC-E-700-1500-125HW (no manufacture date) which is consistent with the description in the Permit, Table 2.
- The boilers run on natural gas fuel.
- All three units were not operating, due to mechanical failure, and three new units were on order.
- No service log was found.
- According to James Breese the university is in the process of finding replacement boilers.

President's Residence, Boiler B1

- The boiler is a National U.S. 209 Series, manufactured in 1967, which is consistent with the description in the Permit, Table 2.
- The boiler runs on natural gas fuel.
- The unit was operating.
- No service log was found.
- The boiler room was being used for laundry and general storage; chairs and boxes were stacked around the boiler. Some material had to be moved to another room to access the boiler.

Sod Farm, Generator G4

- The engine is a Perkins with no engine plate or date, attached to a Katolight generator (with Katolight exterior branding), which is consistent with the description in the Permit, Table 1.
- The engine runs on diesel fuel.
- No service log was found.
- Various branding on the engine identifies it as a Perkins or Detroit Diesel from Perkins.

Portable Use, Generator G7

- The engine is a CAT model 3412 manufactured in 1999, which is consistent with the description in the Permit, Table 1.
- The engine runs on diesel fuel.
- The Logbook was reviewed on site. The earliest entry started on 12/21/2005 and the most recent was 12/15/2022. The Logbook showed that the engine was started up approximately monthly for readiness checking. No oil changes, oil filter changes, or inspections for air filters, belts or hoses were indicated in the logbook.
- Hand-written notations on the fuel filters showed they were changed on 5/27/2020 and the engine hour reading was 252 hours, and notations on the oil filters showed they were changed on 6/25/2019 and the engine hour reading was 241 hours.
- The control panel indicated total hour reading at the time of the inspection was 263 hours.
- Though listed as "portable," the trailer containing this generator is resting on, and securely bolted to, concrete pillars.
- There was some spilled or leaked oil on the floor under the engine.

Sub Station B, Generator G6

- The engine is a CAT model 3412 manufactured in 1999, which is consistent with the description in the Permit, Table 1.
- The engine runs on diesel fuel.
- The Logbook was reviewed on site. The earliest entry started on 12/21/2005 and the most recent was 12/15/2022. The Logbook showed that the engine was started up approximately monthly for readiness checking. Oil changes, oil filter changes, or inspections for air filters, belts or hoses were generally not indicated in the logbook, with a few exceptions.
- Hand-written notations on the fuel filters showed they were changed on 5/27/2020 and the engine hour reading was 252 hours, and notations on the oil filters showed they were changed on 4/13/2020 and the engine hour reading was 241 hours.
- The control panel indicated total hour reading at the time of the inspection was 171 hours.

Getz Shorts Apartments, Boilers B11-B14

- The boilers are two RBI CB750s with no manufacture date, and two Hamilton Engineering HWD 199.1s manufactured on 6/6/2011, which is consistent with the description in the Permit, Table 2.
- The boiler runs on natural gas fuel.
- All four units were operating.
- Service stickers on the boilers showed that the last service on the RBI units was 3/22/2018, and 12/23/14 for Hamilton Engineering units. No list of specific maintenance was found.

McConnell Hall (Paint Booth, not listed in permit)

The two inspection teams regrouped at this location, just after 11:00 am. We met David Barnett, Technical Director, McConnel State Manager who showed us the paint booth and explained how it worked.

- The paint booth is used at McConnell Hall in support of the Theater department's stage productions, for example, spray-painting stage background decorations and props. Mr. Barnett showed us a theater in the same building.
- The paint booth is in a room with a door that closes. Supply air comes in through filtered vents above the entry door. Mr. Barnett said the air filter system works best with the door open.
- 12 filters line one wall of the room. We pulled back the edge of a filter and saw a secondary filter behind it.
- Inside the paint booth I saw spray paint cans. Mr. Barnett said they mostly use the room for spray painting but also use High Volume, Low Pressure (HVLP) spray guns which he pulled from a supply cabinet to show us. He said the paint guns are primarily used by a designer for stage production work.
- Also located in this work area is a metal grinding, cutting, and welding shop. Mr. Barnett said they mostly work with mild steel and aluminum. We saw a storage area for metal pipes and bars in this area.
- For welding, he said they have a Metal Inert Gas (MIG) welder, which uses welding wire (both aluminum and steel). Argon gas is used with this process, he said. When welding, they use a flexible (snaking) fume hood, he said.

- Mr. Barnett said that workers in this area need respirators, and that the university has not done respirator fitting for them recently, so they stopped wearing respirators.
- Safety Data Sheets (SDS) are available for the paints they are using, he said.
- They do not use paint stripper that contains methylene chloride (MeCl), he said. Mr. Barnett opened the paint cabinet, and we found no paint strippers with MeCl stored there.

We left McConnell Hall at about 12:07 pm.

Computer Center, Generator G8

- The engine is a Perkins Series 1300 unit manufactured in 2003, which is consistent with the description in the Permit, Table 1. Additional manufacturing statements on the engine showed that components were manufactured by Caterpillar/Olympian. We were not able to find a power rating for this unit.
- The engine runs on diesel fuel.
- The engine block had an EPA emissions statement that said it conforms to US EPA and CA regulations for heavy-duty nonroad diesel engines.
- The Logbook was reviewed on site. The earliest entry started on 5/19/05 and the most recent was 12/28/21. The Logbook showed that the engine was started up monthly for readiness checking, with gaps. No oil changes, oil filter changes, or inspections for air filters, belts or hoses were indicated in the Logbook.
- Hand-written notations on the oil filters showed they were changed on 6/22/16 and the engine hour reading was 312.33.

Interview with Katie Litzenberger, GSP, Safety Manager

The inspection team met with Katie Litzenberger at about 1:00 pm. We had heard her name come up several times during the inspection so far and wanted to get additional information she may be familiar with as the Safety Manager in the Environmental Health and Safety department for the CWU campus. We introduced ourselves discussed the following topics.

- Medical Waste. We asked if medical waste is generated on site and if so, how it's disposed of. Ms. Litzenberger said their medical waste is picked up by Safe Harbors - a third party contractor – for autoclave processing. She said Stericycle picks up medical waste sharps for disposal.
- Paint Booths. I said we had examined the paint booth listed in the permit, at the Grounds Warehouse, but had also looked at others which are not identified in the permit. They are located at McConnell Hall, Randall Hall and Jongeward Building Carpentry Shop. We said it was likely the State air permit would need to be revised to include the paint booths.
- Engines. We said the emergency generator located at Discovery Hall had been swapped out, which needed to be reviewed for compliance with EPA's New Source Performance Standards (NSPS). In addition, it appeared that other engines may not have their oil changed as frequently as required by EPA's rules for existing and new engines. I said the rules require some additional preventative maintenance which I could provide details about.
- Surplus Warehouse. We asked for a description of how electronic waste (e-waste) and refrigerants are handled for disposal. Ms. Litzenberger said contractor Clean Harbor picks up those materials for disposal. She said the computer monitors are checked to see

if they work. If working, they try to resell the items. I said we may need manifest from the shipments to follow up on the disposal. She also said they submit an annual report to Washington State about this type of disposal (the "Turbo Waste Report").

We took a lunch break off campus and returned for a closing conference at about 2:45 pm at the Jongeward Building.

- **Closing Conference**

Attending:
EPA Inspectors: Charlotte Papp, John Pavitt, Alyson Skeens, Brendan Whyte,
ECY Inspector: Shawn Nolph
CWU: James Breese, Maintenance Mechanic and Site Supervisor; Michael Cox, Construction Coordinator; Bailey Hillard, IH; Berthon Koch, Chief of Campus Police; Katie Litzenberger, Safety Manager; Virgil Logan, Maintenance Specialist; Shane Scott, Associate Vice President.

We went around the table and introduced ourselves. I then discussed the parts of the facility we had visited during the inspection and any compliance concerns we had at that time.

I described the following concerns.

- I said emergency generators at the CWU campus are subject to EPA regulations for reciprocating internal combustion engines ("RICE"). The rule applies to both new and existing engines and requires routine, preventive maintenance such as oil changes and inspecting the air filters, belts and hoses. Based on the maintenance logs and written notes we found with the engines, it looks like the required maintenance was not being performed on time.
- The Discovery Hall engine had been swapped out. ECY Inspector Nolph said he would check with his permitting program to see if that required any changes to their permit, even though it apparently was a like-kind replacement. I said that we found two different stickers on the engine block stating the engine was exempt from EPA emission standards and I would check on whether that was correct. In addition, the replacement engine air intake looks like it doesn't quite fit right (is not flush) with the original components, so we would request records asking for details about the swap.
- The Psychology Department emergency engine No. G2 was observed to have significant oil leaking onto the ground, with absorbent material (kitty litter) placed on top. The engine looks to be in poor condition.
- We observed several paint booths which are not listed in the air permit. They are located at Randall Hall, McConnell Hall, and Jongeward Building Carpentry Shop. These will likely need to be added to the air permit as emission sources. ECY Inspector Nolph said the permit is up for renewal anyway at this time. In the Ceramics Department at Randall Hall, the spray booth air filters were heavily saturated and blocking airflow. At McConnell Hall, the operator said air flow into the booth is not good, and if the door is closed the air "rolls" across the room rather than flowing through the air filters. At the Grounds Warehouse paint booth, we had a question about how the pressure manometer works. It looks like it measures pressure in just one location rather than from up-and-

downstream of the air filters. The air permit requires that it measure changes to pressure across the booth.

- At the Surplus Warehouse, we saw refrigerators that would be picked up for disposal and we want to confirm the refrigerant is properly drained before disposal. We also saw one refrigerator with the compressor missing. The facility representatives said the area is open for people to bring in surplus materials and thought it had come in that way.
- At the Student Union Building we saw a compactor/dumpster with drainage flowing to a storm drain. The storm drain is labeled "No Dumping, Drains to River." There is also a fuel storage tank with the generator in that location which has the potential to get into the drain if there's a fuel leak.
- EPA Inspector Papp discussed the vehicle fleet on campus and said we would review maintenance records.
- I said our asbestos inspection at Nicholson Pavilion found that the abatement of CAB had not started, despite the contractor's notification that work was scheduled to start in January (five months prior). I said I would contact the contractor – Performance Abatement Services - to instruct them to revise the notice as required by EPA's asbestos regulations.

I said we would request records by sending them an email. We confirmed the request would be via email from EPA Inspector Pavitt to Mr. Scott and Ms. Litzenberger. I said I would ask for the records to be provided in two weeks.

We discussed Confidential Business Information (CBI). EPA Inspector Whyte said the facility could claim information provided from this inspection as CBI if they believed it to be so. Mr. Scott said he didn't see any "red flags" that he thought would be CBI.

I asked if anyone had questions for us (the inspectors). No one had any questions.

I said our inspection would not be complete until I reviewed the facility's records along with my notes, and the inspection report was written.

We left the facility at about 4:20 pm

3. Records Review

I reviewed the 2021 **State Air Quality Program, Air Pollution Emissions Inventory Report** submitted by the facility to WA ECY. The report content is dictated by Permit Condition 8. For calendar year 2021, the facility reported fuel usage and hours of operation of emergency engines and boilers B2-B5 and B19-B21 as required. It also included information about the paint booth surface coating activity.

The report indicates the facility is staying well below boiler annual fuel usage limits (Permit Condition 4.2.2 limits natural gas to 1,136 MMcf and ultra-low sulfur diesel fuel to 600,000 gallons).

The report's certification statement at the signature line does not match the required phrasing.

  - Permit Condition 8.2, *"The certification shall state that, based on information and belief formed after reasonable inquiry, the information contained in the document are true, accurate, and complete."*

  - The 2021 Annual Report certification states, *"The information submitted in this report and its attachments is true to the best of my knowledge."*

- Paint and coatings usage stated in the 2021 Annual Report differs from records provided in response to EPA's records request (Attachment 8).
  - The **2021 Annual Report** submitted to ECY states that the Grounds Warehouse paint booth operated for 109.29 hours and used two gallons of "Sher Wood Pre Cat," and attached a Safety Data Sheet (SDS).
  - The records response from the facility for this inspection includes a Spray Booth Operator's Paint Usage Log that indicates no usage in 2021. (The log shows usage in 2020, skips over 2021 and resumes again in January 2022.)

Asbestos Testing and Notifications, Nicholson Pavilion
I requested asbestos records during the on-site inspection from a construction site general contractor. (Attachment 4).

Contractor Lydig Construction provided an asbestos survey which shows that a thorough survey for asbestos was conducted in May 2021, in advance of renovations as required by the asbestos NESHAP regulation (40 CFR § 61.145(a)). The survey identified cement asbestos board (CAB) containing 15% Chrysotile asbestos.

Contractor Performance Abatement Services submitted a notification to WA ECY on 1/11/22 describing their plans to remove 3,600 square feet of CAB panels from the building. The project was scheduled to start on 1/11/22 and end on 6/30/22. The notification was not submitted 10 working days in advance as required (§ 61.145(b)(3)(i)). The start date was inaccurate because work did not start on 1/11/22 as described and still had not started at the time of the inspection. The notice was required to be revised no later than the original start date (§ 61.145(b)(3)(iv)(A)). After our on-site inspection, I called Performance Abatement Services and let them know EPA and WA ECY went to the job site based on their notification and they were not there and had not started asbestos removal. I advised them to revise the notice and they did, on 5/23/22. The revised notice stated abatement would start on 6/13/22 and end on 7/30/22. On 7/6/22 I confirmed via email with the general contractor that abatement work was completed on 7/1/22 (one month ahead of schedule).

Emergency Engines, G1-G11
I also requested records regarding engines, boilers, paint booths, gas dispensing facilities and refrigerant appliance disposal from campus representatives, covering the period May 2020 – May 2022. (Attachment 5). Except as noted below, the facility provided records as requested and, in some cases included records going back further than May 2020. Following is a discussion of the records reviewed for the inspection.

Provide maintenance records for each engine listed in Table 1 of your permit (State air permit # 10AQ-C147). Include records of oil changes, oil filter changes, inspections and replacements of air filters, belts and hoses.

- Records show infrequent maintenance for the group of 11 emergency generators on campus. All generator units are operated approximately monthly for readiness testing and on occasion for planned building power outages. The exception is Sod Farm engine (G4), which has not operated in at least several years. Maintenance records checklists that were reviewed by the inspection team members when found with engines. Operators noted on the checklists the dates of monthly startups and meter readings of engine hours. Some checklists had gaps; they did not record some hours of running. Some checklists were found to include some references to checking the oil and other maintenance.

- Records provided by the facility were "Motor Vehicle Maintenance Records" on which operators tracked specific maintenance activities. These were dated but often not signed. The form being used has a checklist for mobile applications such as checking tires, brakes, transmission and lights. (Attachment 9 is an example of one form for the Student Union Generator, G 9.)

Facility records were reviewed in comparison to EPA's federal air rule, *40 CFR Part 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.* Subpart ZZZZ applies to new and existing units and requires preventative maintenance.[11]

Part 63, Subpart ZZZZ, Table 2d – Required Maintenance (Summary)

Required for Emergency Stationary Compression Ignition RICE	Maintenance Schedule	Records Showing Maintenance June 2019 - May 2022
Change Oil and filter	Every 500 hours of operations or annually, whichever comes first.	**G2:** Oil and oil filter change 11/18/19, 10/18/21, 11/2/21 **G3:** Oil and oil filter change 6/11/20 **G6:** Oil filter change 5/27/20 **G9:** Oil filter change 7/1/20 **G11:** Oil change 6/24/19 and 1/6/20.
Inspect and Replace as Necessary: Air Filters	Every 1,000 hours of operations or annually,	**G2:** Air filter 11/18/19, 10/18/21, 11/2/21

[11] See Table 2d of Subpart ZZZZ for a detailed description of maintenance requirements.

	whichever comes first. Replace as necessary.	
Inspect and Replace as Necessary: Belts/Hoses	Every 500 hours of operations or annually, whichever comes first. Replace as necessary.	None found
Required for Emergency Stationary Spark Ignition RICE	Same as above, plus, inspect spark plugs every 1,000 hours of operation or annually, whichever comes first and replace as necessary.	None found

Approximately three years of records were reviewed for the 10 operating engines. In that period, records show only six of the expected 30 oil and oil filter changes were performed. Reference was found for only three air filters being checked and replaced as needed. No records showed belts and hoses were checked. This level of maintenance is consistent with observations on site, where operators wrote dates on oil filters showing they were generally two years old or older.

Subpart ZZZZ gives sources the option to utilize an oil analysis program as described in § 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of the subpart. EPA inspectors discussed this option with facility representatives during the inspection and their response was that they do not have an oil extension program.

Discovery Hall Engine, Emission Unit G11
Records related to the replacement of the engine, showing what was physically changed. Please provide a description of what was wrong with the old engine which caused the replacement.

- Records show the Discovery Hall Generator was originally installed in 2016 and was replaced in December 2019 when sand in the engine block from the manufacturing process damaged it. Records show the replacement was covered under warranty but do not give a statement or certification that the replacement was like-kind. During the inspection, the inspection team saw that the engine block had two emissions statements related to the replacement engine being exempt from EPA emission standards. (See Discovery Hall Section, above.) However, the inspectors did not find an EPA emissions statement on the engine block to show it met standards that applied at the time of the original construction.

"Portable Use", engine EU G7
The inspection team observed the unit is stationary at a fixed location. Provide the date that the unit was placed in its current location. Please confirm if the unit is the property of CWU and if the unit is operated and maintained by CWU.

- Records show the "Portable" engine because a stationary unit in spring 2018. This physical change to the unit may trigger a permit requirement to update the service manual for the unit. (Permit Condition 6.1.2)

Boilers
Provide diesel use records (gallons per year per boiler). Include fuel purchase records.

The permit limits diesel fuel use for Boilers B2-B5 to no more than 600,000 gallons per 12-month period. (Condition 4.2.2.2) Records show fuel oil usage is insignificant at the New Heat Plant. The facility burned no fuel oil in 2020 and only 304.80 gallons in 2021.[12]

Emissions monitoring records (for CO, NOx and O2), for each boiler with a power rating of 0.4 MM Btu/Hr or more.

- The facility responded that it does not have records of annual monitoring for any of the 17 boilers subject to this requirement, for the last two years. (Condition 6.6.3) The boilers subject to this requirement are B1-B5, B8-B12, B15-B2.

Any emissions monitoring associated with boiler tune-ups. Include documentation of tune-up procedures.

- Records provided show that the three boilers at the New Heat Plant, B2-B4, were tuned May 2-5, 2022 by consultant Yokogawa (Attachment 8). The process included measuring concentrations of O2 and CO during combustion with oil and with gas. Gas concentrations are not included with the consultant's report.

Paint Booths
A list of all paint booths and surface coating booths located at CWU campus.

- A list of paint booths was not provided. However, based on inspectors' observations during the inspection, Safety Data Sheets (SDS) provided by the facility and email with the facility, there are <u>six</u> paint booths, only one of which is listed in the air permit.

    1. Jongeward Grounds Warehouse Building. This paint booth is listed in the permit. (See Permit Condition 2.3.)
    2. Jongeward Carpentry Shop (the facility states this booth is non-usable and decommissioned).
    3. Randall Hall (two units at this location: one paint booth and one ceramics-glazing booth).
    4. McConnell Hall
    5. Hogue Building

Safety data sheets (SDS) for each paint and primer product and ceramic glazing product used in the listed booths.

These records were provided, sorted by location. Of the many dozens of SDS provided, some products contain *manganese compounds* . EPA federal air rule **40 CFR Part 63, subpart HHHHH (6H) - Paint Stripping and Miscellaneous Surface Coating Operations at Areas**

[12] A spreadsheet error in facility records may be undercounting this value by 50%. The actual value may be 608 gallons.

Sources may apply. Subpart 6H applies to spray application of coatings containing compounds of "target HAP" which is defined as containing certain concentrations of manganese as well as chromium, lead, nickel or cadmium. (§ 63.11169(c)). The concentration of manganese in the following product SDS forms has not yet been confirmed by the inspection team and requires further review.

Product Name/Number	Manganese Compound Listed	Paint Booth Location
Great Finishes® Wood Stain Oil-Based Walnut 222A132	Manganese 2-Ethylhexanoate	Hogue Paint Room
Great Finishes® Wood Stain Oil-Based E Amer 222A131	Manganese 2-Ethylhexanoate	McConnell Hall Paint Booth
Great Finishes® Wood Stain Oil-Based Colmpl 222A137	Manganese 2-Ethylhexanoate	McConnell Hall Paint Booth
Great Finishes® Wood Stain Oil-Based Natural 222A142	Manganese 2-Ethylhexanoate	McConnell Hall Paint Booth
Rust -Oleum High Performance Industrial Enamel Aerosol - High Heat (Formerly known as Hard Hat) V2116838, V2176838	Iron Manganese Oxide Manganese Dioxide	McConnell Hall Paint Booth

The quantity of all paints, primers and ceramic glazes used in the listed booths.
Records show the facility is using much less than 55 gallons of paint per calendar month as required. (Condition 4.1.3)

- Records of the pressure sensor gauge at the booth located at the Grounds Warehouse Building, indicating where the sensor(s) are located at the booth, and how they detect pressure.

  This record was not provided.

Gas Dispensing Facility (GDF)
Provide amount of gasoline dispensed per month from the GDF gas pump.

- Records provided show the GDF located on campus at the Jongeward Building dispenses approximately 2,369 gallons of gasoline per month, on average. In the last two years, the highest monthly amount was 3,955 gallons.

- EPA's federal air rule, **Subpart CCCCCC (6C) - National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities** applies to each GDF located at an area source of Hazardous Air Pollutants.[13] (See § 63.11111(a)) Subpart 6C includes work practice requirements for sources dispensing less than 10,000 gallons of gasoline per month. (§§ 63.11111(b) and 63.11116)) Additional requirements apply to facilities with greater throughput volumes.

Mobile Sources
Provide the third-party service records for all diesel vehicles.

- The facility provided a spreadsheet showing off-site maintenance for diesel vehicles.

Refrigerant Appliance Disposal
Please provide copies of the most recent 12 manifests provided by your service contractor for appliances containing refrigerants. I would appreciate receiving the records by June 1st (the same date as the records requested below) if possible. Let me know if you need additional time or have any questions.

- The facility provided manifests which show used refrigerators, icemakers, miscellaneous cooling units and e-waste picked up by service contractor Total Reclaim, Inc., Kent, WA. The dates of pickup were 5/5/22 and 7/28/22.

4. Post Inspection Activity

On 5/18/22, after the exit meeting, I sent a records request to facility representative Shane Scott. On 5/24/22 I updated my request to ask for additional records. (Both requests are included in Attachment 5.) The facility began sending me electronic records, some of which I was unable to open and then were resent.

On 6/17/22, I had a MS Teams meeting with facility representatives Shane Scott, Katie Litzenberger and Jeremiah Eilers to discuss questions I had about their records from my review so far. I also provided compliance assistance materials for federal air rules, subparts 6H and 4Z. A summary of this meeting is attached. (Attachment 6).

On 7/11/22, I called and left a message and then sent an email to facility representative Katie Litzenberger to clarify information about paint booths on campus. Ms. Litzenberger replied the same day (Attachment 7).

[13] An area source is a source that emits less than 10 tons per day of any single HAP or 25 tons of any combination of HAP.